

Senior Communications Specialist

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Today I will talk about...

Science Communications

GOMO Communications

Five Year Overview

Outcomes and Impacts

Next Steps & New Opportunities

Questions

Scientists

Background

Methods

Results

Others

Results

So What?

Background



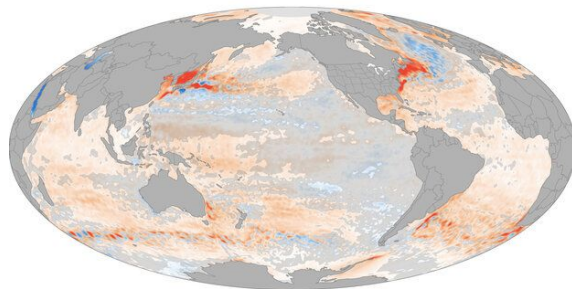
Why is it important to communicate our science?

1. Increase visibility & support



2. Build awareness

OCEAN HEAT TRENDS (1993-2020)



1993-2020

Change in ocean heat content (W/m^2)

-6 0 6

NOAA Climate.gov
Data: PMEL

3. Ensure longevity of the global ocean observing system & enterprise





GOMO's Communications Goals

(in order of priority)

To promote GOMO's research, activities and significance, in line with Strategic Plan goals:

1. **Internally to NOAA Senior Leadership**
2. **Externally to Capitol Hill**
3. **Externally to the variety of public audiences (scientific and not) to raise awareness**
4. **Internally (cross line office) within NOAA to facilitate coordination**

[*Reference GOMO Comms Strategy document](#)



How do we communicate our science?

Internally: taking advantage of **reporting** opportunities and **meetings** with leadership within NOAA

Externally: engaging **storytelling** tailored to the specific audience



The Year is 2017:



Stranger Things, Season 2



Ocean Observing & Monitoring Division

Significantly fewer opportunities to communicate our science:

- Few opportunities to engage with NOAA senior leadership
- No opportunities to engage with Congress
- OOMD webpages were buried within the CPO website
- No direct access to engage with public audiences





Communications Transformation

- Built systems to report news
- Shared SciComm Resources
- Developed strategic messaging and visuals
- Increased coordination with OAR Communications & Public Affairs teams → increased exposure of ocean observing news



Global Ocean Monitoring and Observing Program: Communications Strategy

Overall Communications Goals (in order of priority): to promote GOMO's research, activities and significance, *in line with [Strategic Plan](#) goals*, to

1. NOAA Senior Leadership,
2. externally to Capitol Hill,
3. the variety of public audiences (scientific and not) to raise awareness, and
4. internally (cross line office) within NOAA to facilitate coordination

Key Message about GOMO: (more messages [here](#))

By supporting over one million ocean observations each day, GOMO has increased our understanding of ocean health and vital marine processes, helping improve weather and climate forecasts, predictions for fisheries and ecosystem management, climate policy decisions, and the development of climate change adaptation and mitigation plans that benefit society.

Communications Resources:

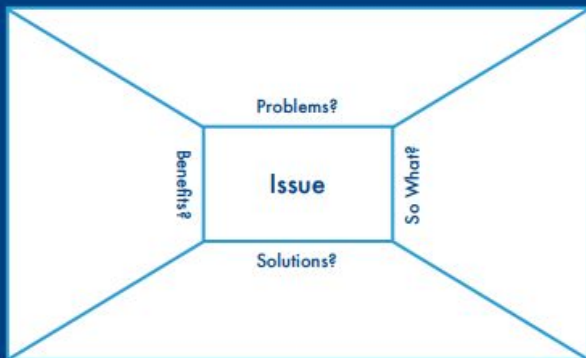
- To submit news, use the [GOMO Communications Reporting Form](#)
- To see what has been posted, view the [GOMO SMM Updates Doc](#)
- To reference what is being posted on the OAR Hub: <https://hub.oar.noaa.gov/Home.aspx>
- Communications Resources folder (including PPT templates):
<https://drive.google.com/drive/u/0/folders/1Nm2p93qZv57mNadld0BcDA9DzC31qKGC>
- GOMO Program Slides, Key Messages & 2paggers folder:
<https://drive.google.com/drive/u/0/folders/1kjL9uJlxjEfZRf5L94Dzlpbml7oQuWqH>
- GOMO Pictures folder:
https://drive.google.com/drive/u/0/folders/1yHdO_aVvjCbra2WVBs7tSBol6V9cYgX-



COMPASS

The Message Box Workbook

Communicating Your Science Effectively



Quick Guide to Newsworthy Science

sharingscience.agu.org

**SHARING
SCIENCE**
A Program of AGU



NEWSWORTHY RESULTS

- Are new or previously unknown
- Advance a field significantly
- Impact our daily lives
- Relate to current events
- Are unexpected or eye-catching
- Go against the current consensus
- Include striking videos or photographs



NON-NEWSWORTHY RESULTS

- Are an incremental advance
- Improve a model or technique
- Confirm what is already known
- Have already been reported
- Summarize the latest in a field (review paper)

AGU100 ADVANCING
EARTH AND
SPACE SCIENCE



Communications Outlets

Internally, within NOAA:

- Weekly Report for the OAR Senior Management Meeting
 - Audience: OAR Senior Management - Program/Lab Directors
- Submit “Hot Items” on the OAR Hub website: hub.oar.noaa.gov
 - Audience: all NOAA but mostly OAR employees
- SMM Spotlight Presentations
 - Audience: OAR Senior Management - Program/Lab Directors

Content: *Upcoming Releases & Announcements; Legislative Engagement; Field Campaigns & Major Scientific Activities; Scientific Publications*

Communications Outlets

Externally, outside NOAA:

- GOMO Community Newsletter
 - Audience: mostly internal ocean observing community (approx 225 contacts)
- GOMO Website: globalocean.noaa.gov - active News page!
 - Audience: internal ocean observing community, science aware general public
- OAR website - research.noaa.gov & social media - @NOAAResearch
 - Audience: science-interested & general public



Global Ocean Monitoring and Observing
NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION

Now that we are a
Program!

ABOUT US ▾

THE OCEAN

RESEARCH ▾

EDUCATION

NEWS ▾

Global Ocean Monitoring and Observing

OUR MISSION

To provide and support high quality global ocean observations and research to improve our scientific understanding and inform society about the ocean's role in environmental change.

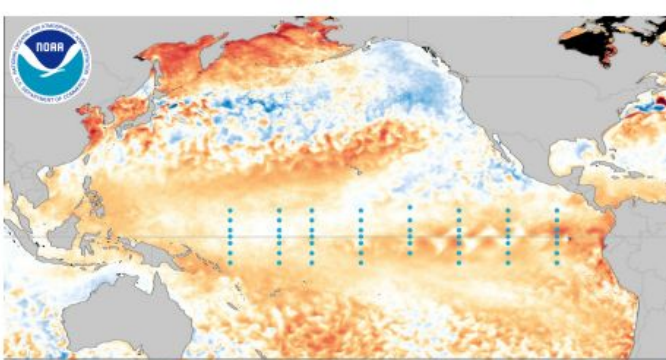
<https://globalocean.noaa.gov>





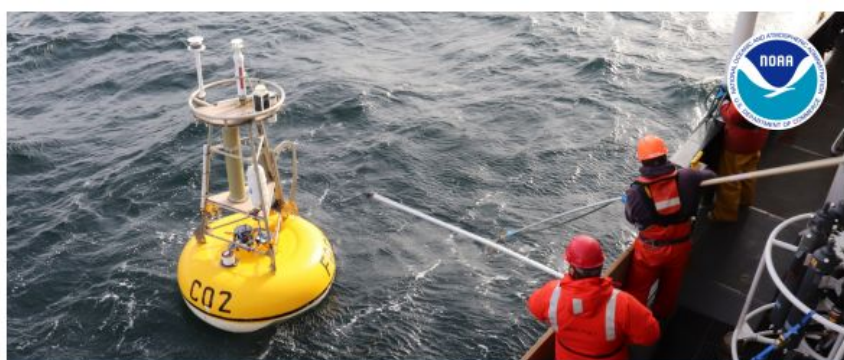
Global Ocean Monitoring and Observing

The ocean covers 71% of the Earth's surface and profoundly affects weather, the environment, marine life, and global population variations, and observing (GO) temperature, salinity, and other properties provides the information our nation needs to reduce risks for it.



Tropical Pacific Observing System

The tropical Pacific Ocean has global impact. It is the source of the strongest and most predictable global climate and extreme weather - El Niño Southern Oscillation (ENSO). NOAA's contributions include:



NOAA Global Ocean Carbon Observing Network

The ocean represents 71% of the Earth's surface, 97% of the Earth's water, and is inextricably linked to climate.

The ocean regulates climate by absorbing and storing carbon dioxide (CO₂) from the atmosphere. Over time, this carbon is transferred to the ocean floor, where it can be stored for centuries. The ocean also plays a role in the U.S. ocean chemistry, and can help answer these questions.

<https://globalocean.noaa.gov/About-Us/Program-Information>

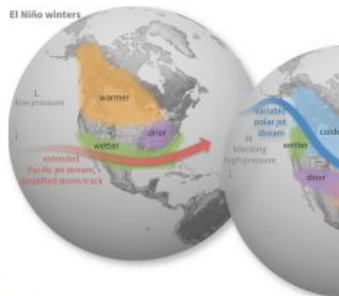
Through GOMO, NOAA supports more than **ONE MILLION** ocean observations each day!

- ◆ We partner with **over 50 countries** in developing and sustaining the global ocean observing system.
- ◆ We **collaborate nationally** with NOAA Laboratories, Universities, Cooperative Institutes, and Federal Agencies to achieve NOAA's mission.

Our Unique Contribution: NOAA's Global Ocean Monitoring and Observing Program is the U.S. Federal source and international leader for sustained, *in situ* global ocean observations and information in support of research, monitoring, and prediction.

ENSO is a cycle of warm (El Niño) and cool (La Niña) episodes of a recurring climate pattern in the tropical Pacific Ocean. Impacts to U.S. winter weather include:

- El Niño usually brings milder conditions to the northern areas and wetter conditions to the south
- La Niña typically brings cooler weather to the northwest and warmer weather to the southeast



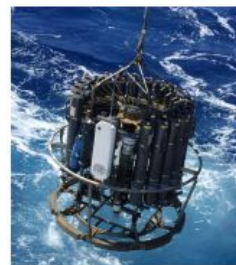
TPOS Benefits to the U.S. — TPOS allows us to gain a greater understanding of the tropical Pacific, the uncertainty of climate variability, and provide improved predictions and longer forecast lead times. Predictions of extreme climate episodes like floods and droughts could save the U.S. billions of dollars and help to improve community resilience.

through the international Global Ocean Ship-Based Hydrographic Investigations Program (GO-SHIP) and the Surface Ocean CO₂ Reference Observing Network (SOCNET). Sustained and improved ocean carbon research can better inform ecosystem and fisheries management, coastal and city planning and climate mitigation and adaptation policy.

How important is the ocean when it comes to climate?

- ◆ A major service the ocean provides is the uptake of CO₂. It is estimated that the ocean absorbs **25% of CO₂ emissions per year**. Without the ocean, the atmosphere would be even warmer than it is today.
- ◆ Based on the estimated social cost and economic value of carbon at \$51 per ton, the ocean's uptake of CO₂ is worth about **\$15B per year, or \$1.4B each day!**

NOAA's Leadership Role: NOAA is at the forefront of ocean chemical, physical, and biological monitoring in support of ocean carbon cycle observations and research. NOAA is a leader in quantifying global ocean carbon uptake and provides **50% of global ocean carbon observations**. NOAA plays an important and influential role in organizing international efforts to address global challenges.



CTD Rosettes (pictured above) measure conductivity, temperature, carbon dioxide and depth throughout the water column.



Global Ocean Monitoring and Observing
NOAA Office of Oceanic and Atmospheric Research
gomo@noaa.gov | globalocean.noaa.gov



Global Ocean Monitoring and Observing Program
NOAA Office of Oceanic and Atmospheric Research
gomo@noaa.gov | tropicalpacific.org

For more info
Cheyenne



Global Ocean Monitoring and Observing Program
NOAA Office of Oceanic and Atmospheric Research
gomo@noaa.gov | globalocean.noaa.gov/Research/Ocean-Carbon-Network

For more information, please contact:
Kathy.Tedesco@noaa.gov

NEWS



4 Ways NOAA is Studying the Ocean's Role

Jessica Mkitarian / Saturday, June 19, 2021 0 1414



New Report Outlines Vision for Ocean C Climate

NOAA SCIENTIST CONTRIBUTES TO UNESCO REPORT

Jessica Mkitarian / Monday, May 3, 2021 0 410



GO-SHIP Launches First GO-BGC Argo F

Jessica Mkitarian / Sunday, May 2, 2021 0 248

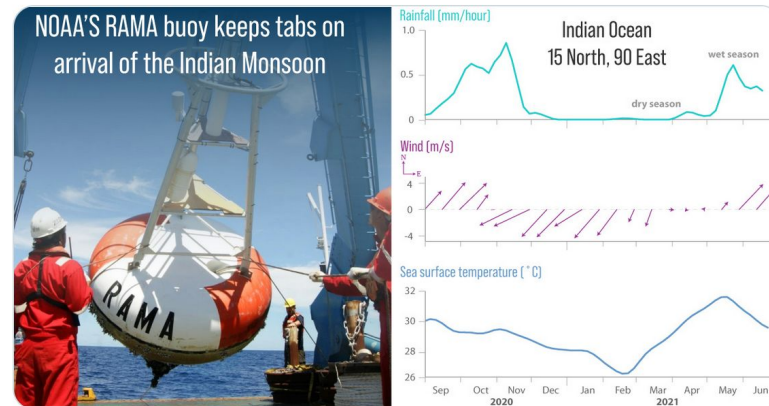


NOAA Research
@NOAAResearch

#MeetABuoy

RAMA is the newest part of the Global Tropical Moored Buoy Array, which also includes buoy arrays in the Pacific and Atlantic Oceans.

RAMA's data is particularly important to India, which is primarily impacted by monsoons. #MeetABuoy
#OceanMonthNOAA



NOAA Climate.gov

11:24 AM · Jun 23, 2021 · Twitter Web App






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In recognition of these OAR employees for their creation and participation in diversity initiatives that have drawn attention to NOAA and the great work and research that women are conducting: Jessica Mkitarian (GOMO), Caitlin Valentine (COMMS) and Dr. Emily Smith (GOMO).

EEO/Diversity Award for Exemplary Service Program

Global Ocean Monitoring Observing Program (GOMO)



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Annual Avg Comms Stats

(2019 - 2021)

INTERNAL COMMS

Hot Items & Weekly Report Submissions: **75**

SMM Spotlight Presentations: **3**

EXTERNAL COMMS

news articles published on GOMO: **24**

OAR articles using GOMO research: **3**

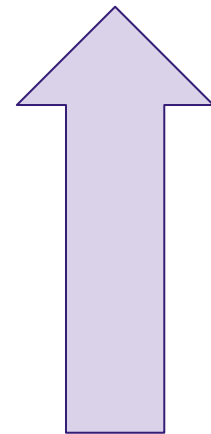
Insights & Successes

Expanding the Website:

- Added 4 webpages (workshop pages, Strategic Plan, DEIA)

Utilizing @NOAAResearch's Social Media:

- **June 2021 - World Ocean Month:** #MeetaBuoy campaign & GOMO web story [4 Ways NOAA is Studying the Ocean's Role in Climate](#)
 - ↑ 50% in users visiting the GOMO website
 - ↑ 63% in sessions
 - ↑ 35% in average session duration (time spent on the website)
 - [4 Ways](#) article has highest views of all articles in 2021 (4,000+)
- December 2021: top @NOAAResearch Facebook post was from [Argo news release](#)



Next Steps & NEW OPPORTUNITIES

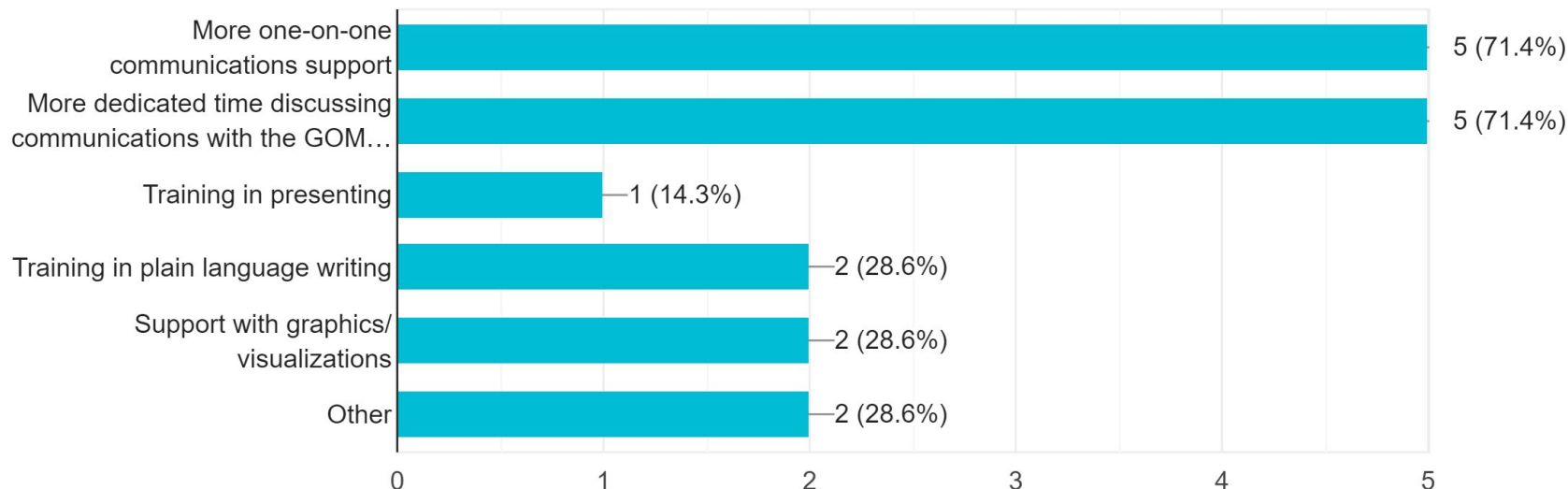
- **Video Projects:** [Satellites of the Sea: Observing the Ocean for Hurricane Research](#)
- **Increasing Comms about Hurricane Research:** [Improving Hurricane Predictions by Observing the Ocean with Cheyenne Stienbarger](#)
- **Showcasing & Expanding Education and Outreach:** Developing a blog for fellows and interns to share their experiences while at GOMO
- **Preparing for Hill Engagement** by developing more Congressional briefing sheets (one for each program)



From Comms Check In Survey Results (Nov. 2021)

What would help you/your portfolio get out messages about the impact of your work?

7 responses



“I think we miss many stories, either because **we don't know about them** (e.g. new published papers), or we **don't have the time/resources to develop the story** (e.g. IPCC report gave us a great opportunity to claim credit for all the ocean knowledge in the report, but we didn't think or plan to utilize that opportunity)”



Opportunities to Expand— *with more Resources!*

- **Developing more web stories that aren't urgent news**
- **Website management:**
 - Google analytics
 - Building new pages
 - Updating pages (Funded Projects, Research pages)
- **Blogs**
- PI/ECOP interviews/spotlights on the website and in newsletter
- Social media (ie LinkedIn, Twitter)
- **More Arctic communications**
- Storymaps and other visual storytelling methods
- More visibility of our **outreach/education** programs
- More documents/messaging geared towards **Congress/staffers** and the public
- Accomplishments reports
- GOMO-hosted webinars
- Etc, etc, etc...

GAPS:
Newsletter
Website
Policy
Outreach



GOMO's communications portfolio is growing!

Opportunities to engage with our many audiences are increasing!

Continued support of communications will lead to greater awareness of the **impact and value of global ocean observations**.

- Increased visibility can lead to **more funding and support**
- **Engaging stories** can increase awareness of what we do and why it's important, and even inspire young people to get involved in the goos!

Thank You + Questions?



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